



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,581	05/31/2001	Fabio Casati	10007896-1	2636

7590 01/09/2006  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

LIN, KENNY S

ART UNIT PAPER NUMBER

2154

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/872,581

Applicant(s)

CASATI ET AL.

Examiner

Kenny Lin

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 November 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/23/05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 1-2 and 4-24 are presented for examination. Claim 3 is canceled.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/10/2005 has been entered.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-2 and 4-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Although the specification disclosed to determine the number of nodes to be activated based on an activation rule, nowhere in the specification suggests or teaches to determine the number of nodes to be activated based on the number of elements in a vector nor based on a size of a vector as claimed

Art Unit: 2154

in claims 1 and 12. Page 16, lines 13-20 of the specification described a determination made based on whether there are more elements in vector V to be processed and repeat the processes until all elements in vector V have been processed. This is clearly different from the claim language of “determining a number of work nodes to be activated in the multinode based on a size of a vector” since the determination described in this session only suggest to repeat the process according to the number of elements in the vector. The descriptions do not clearly or inherently teach to activate the number of nodes based on an activation rule based on the number of elements in a vector nor based on the size of a vector. How is the number of the elements in a vector affecting the activation rule? What is the reason for determining the number of work nodes to be activated based on the size of a vector? What is the benefit for determining the number of work nodes to be activated based on the size of a vector?

5. Claims 1-2 and 4-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Nowhere in the specification suggest or teaches to determine the number of nodes to be activated based on the number of elements in a vector (Claimed in claim 12). Nowhere in the specification suggest or teaches to determine the number of nodes to be activated based on the size of a vector (Claimed in claim 1). Determining the number of nodes to be activated based on a vector does not inherently teach or suggest the determination of the number of nodes to be activated based on the number of elements in the vector.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-2 and 4-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: cooperative relationship between activation rule and elements in a vector is not shown.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: cooperative relationship between activation rule and size of a vector is not shown.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2154

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Du et al (hereinafter Du), US 6,041,306, in view of Applicant Admitted Prior Art (AAPA).
10. Du was cited in the previous office action.
11. As per claim 21, a method for invoking multiple parallel instances of a same node, comprising:
  - a. Defining a multinode (col.4, line 10-28, 49-56) as a node that allows multiple parallel instances of a same work node in a workflow (col.3, lines 1-10, col.4, lines 10-14, 17-22, 45-50);
  - b. Determining, based on an activation rule, whether the activation of the multiple parallel instances of the same work node is a resource-based activation or a variable-based activation (col.2, lines 22-51, col.6, lines 1-6); and
  - c. Activating the multinode to execute plural instances of the same work node in the workflow (col.6, lines 39-48).
12. Du did not specifically teach to allow activation of multiple parallel instance of a same work node. However, the teaching of allowing activation of multiple parallel instance of a same work node is applicant admitted prior art (see page 5, lines 3-21 of the specification). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Du and applicant admitted prior art (AAPA) because AAPA's teaching

Art Unit: 2154

of multiple parallel instance to enable Du's method to have each work node to perform a sequence of activities in parallel and span to several business organizations (see Du, col.4, lines 45-56, see specification page 3, lines 20-21, page 5, lines 3-21).

13. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Du and AAPA as applied to claim 21 above, and further in view of Dugan et al (hereinafter Dugan), US 2002/0083166.

14. Dugan was cited in the previous office action.

15. As per claim 22, Du and AAPA taught the invention substantially as claimed in claim 21. Du and AAPA did not specifically teach that reading a variable name to determine a number of the multiple parallel instances of the same work node to activate when the activation is based on the variable-based activation. Dugan taught to comprise a variable name reader for reading a variable name to determine a number of the multiple parallel instances of the same work node to activate when the activation is based on the variable-based activation (pp. 0067-0069). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Du, AAPA and Dugan because Dugan's teaching of using resource-based activation facility and variable-based activation facility enables Du and AAPA's system to determine the capabilities of each component of each node and create services based on the determination (pp. 0067-0069).

Art Unit: 2154

16. As per claim 23, Du and AAPA taught the invention substantially as claimed in claim 21. Du and AAPA did not specifically teach that activating new instances of the multinode for each element in a vector when the activation is based on the variable-based activation. Dugan taught to comprise a new instance generation unit for starting new instance of the multinode for each new element in the variable identified by the vector (pp. 0067-0069). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Du, AAPA and Dugan because Dugan's teaching of using resource-based activation facility and variable-based activation facility enables Du and AAPA's system to determine the capabilities of each component of each node and create services based on the determination (pp. 0067-0069).

17. As per claim 24, Du and AAPA taught the invention substantially as claimed in claim 21. Du and AAPA did not specifically teach that the resource-based activation is based on a number of resources available for executing the workflow, and the variable-based activation is based on a vector. Dugan taught that the resource-based activation is based on a number of resources available for executing the workflow, and the variable-based activation is based on a vector (pp. 0067-0069, 0106). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Du, AAPA and Dugan because Dugan's teaching of using resource-based activation facility and variable-based activation facility enables Du and AAPA's system to determine the capabilities of each component of each node and create services based on the determination (pp. 0067-0069).



Art Unit: 2154

***Response to Arguments***

18. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***


19. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968. The examiner can normally be reached on 8 AM to 5 PM Tue.-Fri. and every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

766  
12/28/05

 JOHN FOLLANSBEE  
SUPERVISORY EXAMINER  
TECHNOLOGY CENTER 2100